

WHAT IS CLAIMED IS:

1. A method of diagnosing lipodystrophy in a body region in a test subject in vivo comprising measuring the temperature of the body region using infrared thermography, a raise in temperature relative to the same body region in a normal subject indicating the presence of lipodystrophy in the subject.
2. The method of claim 1, wherein the body region is the face.
3. The method of claim 1, wherein the body region is the back of the neck.
4. The method of claim 1, wherein the subject is HIV-positive.
5. The method of claim 1, wherein the patient has previously been treated with protease inhibitors.
6. A method of monitoring the dyslipidemic effect of treatment with a drug therapy in a subject comprising monitoring the body temperature of the subject during drug therapy using infrared thermography, a raise in the

temperature of the subject relative to an earlier measurement of the subject indicating a dyslipidemic effect.

7. The method of claim 6, wherein the drug therapy is treatment with a protease inhibitor.
8. The method of claim 6, wherein the body region is the face or the back of the neck.
9. A method of determining the temperature of internal tissues or organs of a subject comprising replacing a portion of the skin of the subject in a region of the body in proximity to the tissue or organ with an infrared-invisible polymer and measuring the temperature of the region of the tissue or organ using infrared thermography.
10. The method of claim 9, wherein the temperature determining is used to measure the temperature before and after administration of a test agent to the animal, and wherein a difference in temperature resulting from the administration of a test agent indicates that the test agent had a thermodynamic effect on the tissue or organ.
11. The method of claim 10, wherein one or more dosages of the test agent are administered and the temperature of the organ for each dose is determined.
12. The method of claim 10, wherein temperature is measured at one or more time points after administration of the test agent.